

the present contributions and in all future publications, a special effort will be made to use these two terms in their proper and more correct sense.

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## TWO NEW SPECIES OF *PLENCKIA* (a)

C. L. Lundell

*PLENCKIA INTEGERRIMA* Lundell, sp. nov.

Arbor parva, 3--4 m. alta, 20 cm. diam. Folia alterna, integerrima, parva, subchartacea, rufo-punctata, breviter petiolata, cuneato-oblongata, 1.5--3.3 cm. longa, 5--11 mm. lata, apice rotundata, inconspicue emarginata. Cymae axillares. Flores parvi, virides. Pedicelli 4--5 mm. longi, glabri. Calyx profunde quinquefidus, lobis minute eroso-ciliolatis, ca. 0.6 mm. longis. Petala 5, ovata, 1.5--2 mm. longa, 1.2--1.4 mm. lata, minute eroso-ciliolata. Stamina 5, demum patentia. Ovarium in discum subimmersum, biloculare, loculis biovulatis, rarius triovulatis. Fructus samaroides.

A small tree, 3 or 4 m. high, 20 cm. in diameter; branchlets usually slender, elongated, sometimes abortive and spine-like, striate, pulverulent. Leaves alternate, small, glabrous or slightly pulverulent, subchartaceous, punctate-variegated at first, concolorous and faintly variegated with age. Petioles 1.5 mm. long or less, subcanaliculate. Leaf-blades cuneate-oblongate, usually 2.5 to 3.3 cm. long, sometimes only 1.5 cm. long, 5 to 11 mm. wide, apex rounded, usually slightly emarginate, costa raised above as a fine narrow ridge, nearly obsolete below except at base, veins obsolete or nearly so, margin entire, slightly revolute. Cymes axillary, less than 1 cm. long, much reduced, usually 2- or 3-flowered. Flowers green. Pedicels slender, usually 4 to 5 mm. long, sometimes shorter, glabrous, jointed above the base. Calyx deeply 5-lobed, apparently glandular-puberulent, the lobes 0.6 mm. long or less, rounded, minutely erose-ciliate. Petals 5, ovate, 1.5 to 2 mm. long, 1.2 to 1.4 mm. wide, apex broadly rounded, patent, margin minutely erose-ciliate. Stamens 5, patent at anthesis; filaments subulate, 0.6 mm. long or less, inserted on lower edge of disk; anthers basally attached. Disk thick, pentagonal, confluent with ovary. Ovary 2-celled, with 2 or 3 erect ovules in each cell, about two-thirds submerged in disk, the free part slightly compressed laterally, 2-angled, tapering into the very short style. Stigma minutely bifid. Very young immature fruits samaroid, with a terminal wing, punctate-

variegated, the rounded or subtruncate apex crowned by the persistent stigma and style, 1-seeded.

Type in the Herbarium of Arnold Arboretum, S. Venturi 1936, young leaves, flowers, and young fruits, collected at Vipas, Department of Francas, Province of Tucuman, Argentina, at alt. of 850 m., December, 1922.

Additional specimens examined: ARGENTINA: Province of Tucuman, Department of Francas, Vipas, alt. 800 m., Oct. 1921, Venturi 1376, flowers. Province of Salta, Department of Candelaria, alt. 1000 m., Nov. 15, 1929, Venturi 9786, flowers.

The abortive spine-like branches, small entire leaves, and the much reduced inflorescence are among the outstanding characteristics which distinguish P. integerrima. All the other species in the genus have larger, serrate or serrulate leaves.

**PLENCKIA MICROCARPA** Lundell, sp. nov.

Arbor glabra, parva, 5--6 m. alta. Folia parva, alterna, chartacea, crenulato-serrulata, 8--20 mm. longe petiolata, ovata, late elliptica, vel suborbicularia, 2.5--3.5, raro 4.6 cm. longa, 1.6--2.7, raro 3.7 cm. lata, apice breviter acuminata vel acutiuscula, basi rotundata, obscure subcordata, vel abrupte acuta, utrinque reticulata. Cymae axillares. Flores parvi. Pedicelli ca. 1 mm. longi. Calyx profunde quinquefidus, lobis rotundatis, minute ciliolatis. Petala 5, suborbicularia, 1.3--1.6 mm. longa, minute eroso-ciliolata. Ovarium in discum subimmersum, biloculare, loculis biovulatis. Fructus samaroideus, oblanceolati-oblongus, 1.4--1.6 cm. longus.

A glabrous tree, 5 to 6 m. high, much-branched; branchlets slender, striate, drying reddish or reddish-black. Leaves alternate, small, chartaceous, concolorous or slightly paler beneath, minutely stipulate. Petioles very slender, shallowly canaliculate, 8 to 20 mm. long. Leaf-blades ovate, broadly elliptic, or suborbicular, usually 2.5 to 3.5 cm. long, sometimes as much as 4.6 cm. long, usually 1.6 to 2.7 cm. wide, sometimes as much as 3.7 cm. wide, apex short-acuminate or acutish, base rounded, obscurely subcordate, or abruptly acute, margin crenulate-serrulate, reticulate-veined, costa and veins prominulous on both surfaces. Cymae axillary, much-branched, usually 1.5 cm. long or less, rarely 2 cm. long. Flowers minute, whitish. Pedicels about 1 mm. long. Calyx deeply 5-lobed, the lobes rounded, minutely ciliolate. Petals 5, suborbicular, 1.3 to 1.6 mm. long, minutely erose-ciliolate. Stamens 5; filaments about 0.5 mm. long, inserted on margin of disk; anthers attached at base. Ovary almost entirely submerged in disk, 2-celled, with 2 erect ovules in each cell. Stigma capitate. Samaras oblanceolate-oblong, small, 1.4 to 1.6 cm. long, including the wing, apex

rounded, crowned by the persistent stigma, the body 9 to 11 mm. long, terete, striate, with the wing decurrent along the sides to the base, 1-seeded; the seed erect, about 12 mm. long, dark red and minutely verrucose; cotyledons nearly flat, lanceolate-linear, about 1 cm. long, 1.2 mm. wide; radicle very short, about 0.7 mm. long.

Type in the Royal Botanic Gardens, Kew, B. Balansa 4477, fruits, collected on the east slope of Cerro Hu, near the Paraguay, Paraguay, April 10, 1883.

Additional specimens examined: PARAGUAY: in forest, Cerro Hu, near the Paraguay, Oct. 1881, Balansa 3079, flowers.

BRAZIL: Minas, M. A. Glaziou 16741, flowers.

P. microcarpa differs from P. populnea Reiss. in its small fruits which do not exceed 1.6 cm. in length, and small leaves. From P. bahiensis Loes. it may be readily distinguished, according to description, by the small ovate leaves and longer petioles.

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(a) Papers from the Herbarium of the University of Michigan.

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## TWO NEW SPECIES OF ERYTHRINA FROM CENTRAL AMERICA

B. A. Krukoff

ERYTHRINA FOLKERSII Krukoff & Moldenke, sp. nov.

Arbor; ramulis glabris; petiolis glabris inermis; petiolulis subgracilibus glabris; laminis foliorum chartaceis plerumque late ovatis glabris, ad basin rotundatis vel subtruncatis; inflorescentiis dense tomentosis; pedicellis dense tomentosis; calyce tubuloso-campanulatis extus adpresso-tomentellis, ad apicem rotundatis et saepe emarginatis.

A small or medium-sized tree; branchlets stout, grayish, glabrous; petioles rather stout, striate, yellowish, 21--23 cm. long, glabrous, unarmed; petiolules rather slender, 0.8--1.0 cm. long, glabrous; leaflet-blades chartaceous, green above, slightly paler beneath, usually broadly ovate, 11--18 cm. long, 7.5--13.5 cm. wide, acute or short-acuminate at apex, rounded or subtruncate at base, glabrous; midrib prominent above and beneath; secondaries 6 or 7 per side, ascending, prominent above and beneath; tertiaries prominulous on both surfaces; veinlet reticulation discernible to the naked eye above and beneath; inflorescences 17--36 cm. long, densely covered with rather loose brown toment-